

Submission form (Plug-in generation)

Please email your submission to: connection.feedback@ea.govt.nz by 5pm, Tuesday 6 October 2026

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Questions on issues regarding plug-in generation

Questions	Comments
Q1. Do you have any views on our characterisation of plug-in generation?	EnergyPak is a Christchurch-based solar equipment supplier. We supply panels, inverters, batteries, mounting equipment and complete solar kits. Our interest is practical: if plug-in solar becomes legal in New Zealand, we need to know what a compliant product looks like and how customers can use it without an unnecessarily complicated process. We broadly agree with the Authority's description. The final rules should clearly distinguish between PV panel DC capacity, inverter AC output and maximum export, as these are not necessarily the same. For example, a system could have around 1 kW of panels connected to an inverter limited to 800 VA. The definition should also allow for future plug-in batteries and other small energy devices.
Q2. What network performance requirements should apply to plug-in inverters in New Zealand, and why?	At a minimum, we would expect anti-islanding, voltage and frequency protection, automatic disconnection outside permitted grid conditions, and acceptable power quality. These protections should apply even though the system is small. Product safety issues, including exposed plug pins and safety on disconnection, are better dealt with through electrical safety and product standards than duplicated in the Code. We would encourage alignment with Australian inverter requirements where practical, as suppliers already work within the AS/NZS standards system.
Q3. What do you think of the Authority excluding plug-in generation standards from the Code?	We support keeping product technical standards outside the Code, provided the required protections are covered by the electrical safety and product compliance framework. Customers should be able to rely on a compliant product without having to read the Code themselves. Our main concern is consistency. A nationally compliant product should not then face different technical requirements from each lines company.
Q4. Do you agree that in the absence of a professional intermediary, it will be challenging to obtain a Part 6-type application from a plug-in generation consumer? Why, why not?	Yes. The current distributed generation process assumes someone involved understands solar systems, inverter settings and network requirements. That is very different from a customer buying a small plug-in product in a shop or online. If the process is too technical, many customers will struggle to complete it.
Q5. For a consumer to connect plug-in generation to their premises, should some form of Part 6-type application process be required? Why, why not?	Networks should have reasonable visibility of these systems, but we do not think this requires the existing Part 6 application process for every compliant plug-in product. Confirming product compliance and recording where the product is used serve different purposes. For a pre-certified product within a defined low-capacity class, a full engineering assessment at each property seems unnecessary.

Q6. If a form of Part 6-type application process should be implemented for plug-in generation, do you see that is a notification/registration, or an application that requires distributor approval? Why?	For compliant plug-in systems within an agreed capacity limit, we would favour notification or registration. This would give networks visibility without turning a small consumer product into a full solar connection project. Distributor approval could remain necessary for systems outside the standard plug-in category.
Q7. What information should be required if a registration or application for a plug-in generation unit is to be implemented?	Registration should collect the ICP or installation address, manufacturer and model, serial number, inverter AC rating, PV DC capacity, compliance or certification number, whether a battery is included, and the registration date. Much of this could be populated from the product record. Detailed electrical drawings should not normally be needed for a certified plug-in kit.
Q8. Would participants benefit from a registry that captures information about plug-in generation? Why, why not?	Yes, provided it is simple to use and update. A registry could help distributors, retailers and regulators understand where these products are being used. Because plug-in systems may move between properties, customers need an easy way to update the location so the information remains useful.
Q9. Should the existing registry be used? Why, why not?	Yes, if the existing registry can be adapted without making registration complicated. We would prefer one national system to separate distributor databases. A simple customer-facing registration page could feed the relevant information into the existing registry.
Q10. Should entering information about plug-in generation be a requirement only after export has been identified at an ICP? Why, why not?	No. Registration at purchase or commissioning would be better, as the system would otherwise already be operating before export was detected. Reverse power detection could still help identify systems that have not been registered.
Q11. Would the type of information able to be collected at point of sale be sufficient to meet industry needs? Why, why not?	We think point-of-sale information could meet most industry needs. The seller already holds the product details, including the model, serial number, ratings and compliance information. The customer would need to confirm the address or ICP where the product will be used. A QR code or serial-number-based registration page could make this straightforward.
Q12. Should the MEPs reverse power indicator be leveraged in identifying potential plug-in generation export? Why, why not?	Yes, mainly as a secondary check. Reverse power can indicate generation, but it can also indicate metering or installation issues. Linking the indicator with registration information should help participants interpret the alert and identify cases that need follow-up.
Q13. Do you agree there is merit in considering whether retailers should be the primary customer interface for plug-in generation registration/notification? Why, why not?	Retailers are well placed to handle export payment and metering questions. For initial registration, the supplier may be better placed because we already hold most of the product information. We would prefer a process where the supplier or customer registers the device, with the retailer involved if the customer wants payment for export.
Q14. Do you have any other suggestions on how consumers could be informed of Code requirements for plug-in generation?	The information should come with the product. A QR code on the packaging or in the manual could link to one national webpage explaining capacity limits, registration, safe use, export and payment arrangements, and what customers need to do if the system moves to another property. Customers should not have to interpret the Code themselves.
Q15. Should an ability for plug-in generation consumers to receive payment for export be predicated by some form of Part 6 application and approval process? Why, why not?	Paid export can reasonably involve an additional process, as it requires accurate export metering and retailer involvement. We would support a simple pathway for customers mainly using plug-in solar for self-consumption, with an additional retailer and metering process for those seeking export payment. We do not think payment alone necessarily justifies a full Part 6 distributor approval process for a small, compliant system.
Q16. What measures could be implemented to inform consumers of electricity export at their ICP that is potentially associated with	Smart meter information, retailer apps or inverter monitoring could help customers see whether they are exporting. The information should explain whether their meter can record

plug-in generation, and what information should this include?	export, whether their retailer will pay for it, and what needs to change before payment can begin.
Q17. Should consumers be proactively informed of the potential for plug-in generation to export to a network. If so, which party is best placed to undertake this education role?	Yes. Some customers may assume all generation is consumed inside the house. Suppliers should explain at the time of sale that export can occur, while retailers should explain the metering and payment arrangements. A consistent national explanation would help avoid conflicting advice.
Q18. What issues do you see with more UFE in the reconciliation system as a result of more export from plug-in generation?	Initially, we expect the additional unaccounted for electricity (UFE) to be relatively small because individual systems are low capacity and much of the generation is likely to be consumed on site. If uptake grows substantially, the effect on reconciliation may become more significant. The Authority should monitor this using actual data and review the arrangements as needed.
Q19. Do you agree with our view that plug-in generation export with no measurement enabled can be treated as UFE in reconciliation processes, with no need for formal gifting documentation? Would your view change as plug-in generation increases?	Yes, for small amounts of incidental export we think treating unmeasured export as UFE without formal gifting documentation is practical. Separate paperwork would add administration for limited benefit. Our view could change if plug-in generation grows enough to have a material effect on reconciliation, so the approach should be reviewed as uptake increases.
Q20. If gifting documentation were to be required by a plug-in generation consumer, how could this be facilitated?	If gifting documentation is required, it should be included in the same digital registration process. The customer could acknowledge that they are not requesting payment for incidental export, using wording that meets the relevant requirements. A separate form would make the process harder to follow.
Q21. Are there other genuine issues identified by the reverse power indicator?	Yes. Reverse power indicators can identify metering or installation faults as well as generation. We would retain them and use registration information to help distinguish expected export from an event that may need investigation.
Q22. Should the requirement on the MEP to notify the retailer via a reverse power indicator be reconsidered, if more plug-in generation is used? Why, why not?	We would consider filtering or changing how notifications are handled, rather than removing them. Where an ICP has registered compliant plug-in generation, an expected export alert could be treated differently. Unexpected reverse power at an ICP with no registered generation may still need investigation.
Q23. Is there a way for a MEP to filter out plug-in generation related reverse power indicators?	Potentially, if a plug-in generation flag is linked to the ICP. This could help metering equipment providers and retailers distinguish expected export from other reverse power events. The detailed process should be developed with MEP input, as it will depend on their metering systems.
Q24. Should Part 10 include an exclusion for requiring import/export metering for plug-in generation? Why, why not?	We support a Part 10 exemption from mandatory import/export metering for compliant plug-in systems where the customer is not seeking export payment. A mandatory meter change could account for a large part of the cost of a small system. Customers who want payment for export should have suitable import/export metering.
Q25. Should Part 6 clarify requirements for a plug-in generation system being connected alongside approved permanently-fixed DG?	Yes. Part 6 should make the requirements clear where plug-in generation is added alongside approved fixed generation. The main issue is the total possible export from the property. If the existing solar system already operates at the approved export limit, adding an independent generator could take the site above it. Customers need a simple explanation of when further approval or export control is required.
Q26. Should the Code clarify limits on the amount of plug-in generation capacity that can be connected at an ICP (noting any standards developed may define limits)?	Yes. A clear capacity limit per ICP would give customers, suppliers and networks more certainty and avoid several plug-in units exceeding the intended limit. The Code and any product standards should clearly state whether the limit concerns PV DC capacity, inverter AC output, maximum export or total plug-in capacity at the ICP. We are not suggesting New Zealand automatically adopt an 800 W limit before the technical work is complete. From a product perspective, inverter AC output or maximum possible export is

	generally more useful than panel wattage, because panel capacity can exceed what the inverter can produce.
Q27. What sources of information could the Authority use to monitor uptake of plug-in generation and/or any issues that may arise?	The Authority could use product registration data, retailer and MEP information, reverse power indicators, distributor data, electrical safety reporting and customer complaints to monitor uptake and identify emerging issues. Suppliers and importers may also be able to provide aggregate sales figures from time to time. This could give a broader indication of market uptake without sharing customer-level information.
Q28. Do you agree with our overall characterisation of the challenges of plug-in generation? Why, why not?	Broadly, yes. National consistency is particularly important for suppliers and customers. A nationally compliant product should not face a substantially different process depending on the distribution network the customer is connected to. We also encourage the Authority, MBIE, WorkSafe and Standards New Zealand to keep product and inverter requirements aligned with Australia where practical. Manufacturers consider market size when deciding whether to test and certify a product. A common Australia/New Zealand product platform, with necessary local requirements for registration, installation and network operation, could improve product choice, competition and costs for New Zealand customers.
Q29. Which of the challenges outlined in this paper present the most pressing issue for the Authority to address?	The most useful early decisions are what qualifies as plug-in generation, what standards the product must meet, whether registration is sufficient or distributor approval is required, and how small amounts of incidental export will be treated. Once these are clear, suppliers can develop and source compliant products with more confidence. We support preparing for plug-in generation with proper electrical safety, anti-islanding protection, sensible capacity limits and enough registration to give the electricity sector visibility. The process should remain proportionate to a small, pre-certified consumer product. Product design, testing, certification and importing take time, so early clarity will help suppliers prepare. EnergyPak would be happy to provide further information from a supplier or importer perspective if useful.